

WHAT IS CLAIMED IS:

1. A method for cross development via wireless communication in a host computer which communicates with a target board having a microprocessor to execute cross development to a program of the microprocessor, the method comprising the following steps of:

requesting a permission to occupy the microprocessor from the target board via a wireless network;

- if a message allowing occupancy of the microprocessor is received from the target board in response to the request, transmitting information for cross development to the target board via the wireless network; and

receiving program execution result information from the target board in response to the cross development information to execute a remote debugging about the program execution results.

2. A method for cross development via wireless communication in accordance with claim 1, wherein the wireless network is a Bluetooth network.

3. A method for cross development via wireless communication in accordance with claim 2, wherein the Bluetooth network is a Piconet network of the Bluetooth.

4. A method for cross development via wireless communication in a target board which has an embedded microprocessor and communicates with at least one host computer to execute cross development to a program of the microprocessor, the method

comprising the following steps of:

receiving a signal requesting a permission to occupy the microprocessor from the target board via a wireless network;

judging whether the microprocessor is occupiable in response to the signal, and

- 5 if the microprocessor is occupiable, transmitting an occupancy-permitting message to the host computer which requested the permission;

receiving information transmitted from the host computer for executing cross development via the wireless network, in response to the occupancy-permitting message; and

- 10 executing the program according to the information for cross development and transmitting execution result information to the host computer via the wireless network for remote debugging about execution results.

5. A method for cross development via wireless communication in
15 accordance with claim 4, wherein the wireless network is a Bluetooth network.

6. A method for cross development via wireless communication in accordance with claim 5, wherein the Bluetooth network is a Piconet network of the Bluetooth.

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7. A system for cross development via wireless communication which communicates with a target board having a microprocessor to execute cross development to a program of the microprocessor, the system comprising:

- 25 means for requesting a permission to occupy the microprocessor from the target board and judging whether the microprocessor is occupiable in response to a signal

transmitted from the target board in response to the request;

means for wirelessly communicating information for cross development with the target board, if the microprocessor is occupiable; and

means for executing remote debugging in response to program execution result
5 information received from the target board.

8. A system for cross development via wireless communication in accordance with claim 7, wherein the communicating means is a BT module.

10 9. A cross development system of a target board via wireless communication which communicates with at least one host computer to execute cross development to a program of a microprocessor embedded in the target board, the system comprising:

means for judging whether the microprocessor is occupiable in response to an occupancy-request signal about the microprocessor received from the host computer;

15 means for wirelessly communicating information for executing cross development with the host computer, which sent the occupancy-request signal, if the microprocessor is occupiable; and

means for executing a corresponding program in response to the received information to execute cross development.

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10. A cross development system of a target board via wireless communication in accordance with claim 9, wherein the wirelessly communicating means is a Bluetooth network.

25 11. A data transceiver system for executing program cross development of a

target board using at least one host computer, comprising:

a first wireless communication block loaded on the host computer for wirelessly transmitting first information for cross development of the target board to the target board and receiving second information corresponding to the first information from the target board; and

a second wireless communication block loaded on the target board for sending third information about application program and debugging execution transmitted from the host computer to the target board and sending execution results to the first wireless communication block.

12. A data transceiver system for executing program cross development of a target board in accordance with claim 11, wherein the informations contain at least one of a group including a compiled application program information, a microprocessor occupancy-request signal information and a program debugging information.

13. A data transceiver system for executing program cross development of a target board in accordance with claim 11, wherein the first and second wireless communication blocks are BT modules.

14. A data transceiver system for executing program cross development of a target board in accordance with claim 11, wherein the first wireless communication block or the second wireless communication block includes a BTA.